

Title (en)

SYSTEM AND METHOD FOR CROP MONITORING AND MANAGEMENT

Title (de)

SYSTEM UND VERFAHREN ZUR ERNTEÜBERWACHUNG UND -VERWALTUNG

Title (fr)

SYSTÈME ET PROCÉDÉ DE SURVEILLANCE ET DE GESTION DE CULTURE

Publication

**EP 4027768 A4 20230920 (EN)**

Application

**EP 20863283 A 20200910**

Priority

- US 201962898727 P 20190911
- IL 2020050987 W 20200910

Abstract (en)

[origin: WO2021048848A2] A crop management system including at least one crop monitoring subsystem including at least one crop sensor assembly for sensing at least one crop growth parameter in a predetermined region, at least one field monitoring subsystem including at least one field sensor assembly for sensing at least one field parameter in the predetermined region, an analysis engine receiving an output from at least one of the at least one crop monitoring subsystem and the at least one field monitoring subsystem and being operative to identify at least one anomaly in at least one of the parameters and an anomaly locator operative to provide an output indication of spatial coordinates of at least one location of the at least one anomaly.

IPC 8 full level

**A01C 21/00** (2006.01); **A01B 79/02** (2006.01); **A01G 22/00** (2018.01); **G01N 33/00** (2006.01); **G06Q 50/02** (2012.01)

CPC (source: EP US)

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**G01N 33/0098** (2013.01 - EP US); **G06Q 10/04** (2013.01 - US); **B64D 1/16** (2013.01 - US); **B64U 20/40** (2023.01 - EP);  
**B64U 2101/30** (2023.01 - US)

Citation (search report)

- [I] KR 20180055604 A 20180525 - JEOLLANAMDO [KR]
- [Y] JP 2014198012 A 20141023 - HITACHI SOLUTIONS LTD
- [A] JP 2015008699 A 20150119 - HITACHI SOLUTIONS LTD
- [A] US 2013308675 A1 20131121 - SNEED DOUG [US], et al
- [XII] KUSNIEREK KRZYSZTOF ET AL: "Challenges in using an analog uncooled microbolometer thermal camera to measure crop temperature", INTERNATIONAL JOURNAL OF AGRICULTURAL AND BIOLOGICAL ENGINEERING, August 2014 (2014-08-01), Beijing, pages 60, XP093072314, Retrieved from the Internet <URL:[https://ijabe.org/index.php/ijabe/article/view/1041/pdf\\_1](https://ijabe.org/index.php/ijabe/article/view/1041/pdf_1)> [retrieved on 20230809], DOI: 10.3965/j.ijabe.20140704.007
- [Y] J-H LENTHE ET AL: "Digital infrared thermography for monitoring canopy health of wheat", PRECISION AGRICULTURE, KLUWER ACADEMIC PUBLISHERS, BO, vol. 8, no. 1-2, 16 March 2007 (2007-03-16), pages 15 - 26, XP019483751, ISSN: 1573-1618, DOI: 10.1007/S11119-006-9025-6
- [A] MUNIR M SAFDAR ET AL: "An intelligent and secure smart watering system using fuzzy logic and blockchain", COMPUTERS & ELECTRICAL ENGINEERING, PERGAMON PRESS, GB, vol. 77, 28 May 2019 (2019-05-28), pages 109 - 119, XP085758035, ISSN: 0045-7906, [retrieved on 20190528], DOI: 10.1016/J.COMPELECENG.2019.05.006

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MX 2022002866 A 20220325; US 2022318693 A1 20221006

DOCDB simple family (application)

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US 202017642215 A 20200910